# ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR A PROPOSED 400kV TRANSMISSION LINE BETWEEN PERSEUS SUB-STATION (DEALESVILLE) AND MERCURY SUB-STATION (VIERFONTEIN), FREE STATE PROVINCE

# DRAFT MINUTES OF A LANDOWNER WORKSHOP

07 AUGUST 2003 AT 14:00

**COMMANDO HALL, BOTHAVILLE** 

#### DRAFT MINUTES FOR COMMENT<sup>1</sup>

#### 1. OPENING AND WELCOME

#### DR DAVID DE WAAL (AFROSEARCH) AND MS BERNADETTE VOLLMER (SEF)

The Chairperson (Dr David de Waal) welcomed all present. He emphasised that this concerned a sensitive subject. He promised that he would ensure that parties wishing to ask questions, raise issues or air their views would have the opportunity to do so.

The Chairperson gave a quick overview of the process:

The process started off with Eskom's planning department identifying a need, thereafter Eskom identified potential corridors that would be practical from a construction and operational point of view. The following step was to appoint an environmental consultant to conduct studies assess the environmental and social feasibility of the proposed corridors.

To date, the Chairperson stressed, no final alignment has been decided on – only a preferred corridor. The current process is aimed at engaging landowners in the planning process to provide input.

Once the Environmental Impact Assessment (EIA) was completed and a proposed alignment decided on, an EIA Report would be submitted to the National Department of Environmental Affairs and Tourism (DEAT) for decision-making.

The Chairperson emphasised the need to involve all affected parties in the current process. He noted that it was almost certain that a transmission line between the Mercury and Perseus substations would be constructed, but that it was not yet clear exactly where the line would go. From the studies conducted to date, it seemed that option 1 (as indicated on the map in the Background Information Document (BID)) was the most appropriate option, but it was still possible that studies conducted at present could indicate that another route had to be considered. Before handing over to Ms. Vollmer of Strategic Environmental Focus, the Chairperson reiterated that no detail alignment had been decided on.

<sup>&</sup>lt;sup>1</sup> Please note that this set of minutes is not a verbatim reflection of the meeting, but an attempt to reflect the presentations and discussion session in a clear and concise manner. The presentation section of the minutes is a summary of the information provided at both meetings (I.e. the meeting at Bultfontein on 06 August and the meeting at Bothaville on 07 August 2003.)

The Chairperson asked Ms Bernadette Vollmer of Strategic Environmental Focus (SEF) to introduce the various representatives from Eskom and the consultants. Ms. Vollmer introduced the following:

- From Eskom: Transmission:
  - Mr Levy Maduse Project Leader;
  - Ms Carol Streaton Public Participation Advisor; and
  - Mr Koos van der Merwe Negotiator.
- From the Consultants:
  - o Dr David de Waal Public Particiaption Consultant (Team Leader);
  - Ms Marita Oosthuizen Public Participation Consultant; and
  - Mr Jones Shongoane Assistant.

### 2. PURPOSE OF THE MEETING

# DR DAVID DE WAAL (AFROSEARCH)

The Chairperson explained that a need for a 400kV transmission line from the Mercury to Perseus substations was identified by Eskom's Transmission Department. In accordance with environmental legislation, an Environmental Impact Assessment (EIA) had to be conducted. Strategic Environmental Focus is conducting this study and has already completed the first phase, namely the Scoping Study. As part of this study, three potential corridors were assessed (as indicated on the 1:50 000 maps at the meeting). The aim of a Scoping Study in terms of the EIA Regulations was to assess the bio-physical and social environment in an effort to identify the preferred corridor as well as to identify aspects that may potentially have a significant impact on the environment. At the end of the Scoping Study, it was found that "alignment 1" (as indicated on the maps and in the Background Information Document (BID) proved to be the preferred corridor.

During the second phase (the EIA Phase) of the study, this corridor and the aspects identified would be investigated in more detail.

The Chairperson confirmed that this meeting formed part of the EIA Phase that had started very recently. In the light of this, the Chairperson stated that the purpose of the meeting was to:

- Provide feedback regarding the studies conducted to date;
- To indicate the preferred corridor;
- Give Eskom the opportunity to explain the rationale behind the project and to give an overview of their construction practices;
- Indicate the potential environmental impacts already identified; and
- Identify detailed issues and concerns from the affected landowners. The aim was to refine the alignment corridor by obtaining information from the landowners who were familiar with the conditions on the ground and who could provide the team with specific information.

#### AGENDA

#### DR DAVID DE WAAL (AFROSEARCH)

The Chairperson indicated that he would prefer to divert from the proposed agenda provided to the attendants. He suggested that items be handled in the following order:

- An explanation on the need for the project;
- An overview of the findings of the Scoping Study;
- An explanation of Eskom's construction practices;
- A discussion where all attendants could ask questions, raise issues etc. part of this discussion would take place around the map; and finally
- An indication of the way forward.

#### 4. RULES OF THE GAME

#### DR DAVID DE WAAL (AFROSEARCH)

The Chairperson reconfirmed that this was not an easy subject to deal with and asked that the meeting be conducted in a structured way where everybody communicated via the Chairperson. He indicated that such an approach would also make minute taking easier.

#### 5. PRESENTATIONS

#### DR DAVID DE WAAL (AFROSEARCH)

The Chairperson asked Messrs. Vollmer and Streaton to make their presentations. Ms. Vollmer's presentation was structured around the Environmental Impact Assessment (EIA) process with an emphasis on the proposed transmission line, while Ms. Streaton explained the rationale for the proposed project as well as Eskom's construction practices. She also outlined the basic negotiation process.

#### 5.1 NEED FOR THE PROJECT

#### MS CAROL STREATON (ESKOM: TRANSMISSION)

From the outset, Ms. Streaton emphasised that transmission lines cost a great deal of money (in the region of R 1 to 2 million per kilometre depending on the receiving terrain) and that there had to be a very strong need for Eskom to decide that a new transmission line was required. Eskom only considers the construction of a transmission line after all other means of supplying power are exploited. Financing a 400kV transmission line like this one is a business decision. The finance, which is sought on the open marketm, and the return on investment plays an important role. Eskom aims to keep the cost of electricity as low as possible in an effort to support foreign investment and the creation of jobs. For this reason, Eskom did not construct new transmission lines unless it was absolutely necessary.

Following, Ms. Streaton explained why this specific transmission line was required. She indicated that part of the Eskom: Transmission system backbone that ran from the ALPHA sub-station

(near Standerton) to the BETA sub-station (near Bloemfontein) was under severe constraint. She expanded on all the additional lines, which would be built to supply the Coega development, and the resulting network strengthening would be necessary.

Currently the Port Elizabeth area was experiencing rapid growth due to the Coega development. There was 670MW of electricity currently available to the area, but it was anticipated that a further 1 500MW would be needed (1 000MW for the proposed smelter and a further 500MW due to expected new industrial developments) and the 1.5% natural load growth.

The construction of the 400kV transmission line from Mercury to Perseus was part of Eskom's network strengthening programme and was necessary in an effort to balance the grid (It was explained that the electricity grid was like the water system in a home. As soon as a tap was opened the pressure in the system became weaker.) It was therefore important to strengthen the network between the Mercury and Perseus sub-stations as an alternative supply to the planned supply to the Eastern Cape via Harding, Umtata, East London and Port Elizabeth.

Ms. Streaton showed a series of slides indicating the various networks strengthening options investigated and the 400kV lines that were to be built in the near future as well as those planned for the long term. She also indicated for which transmission lines Environmental Impact Assessment processes were underway.

Ms. Streaton concluded by stating that Eskom: Transmission had to start planning well in advance, since transmission lines had a very long lead time.

# 5.2 BACKGROUND TO THE STUDY AND THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

#### Ms Bernadette Vollmer (Strategic Environmental Focus - SEF)

A summary of Ms. Vollmer's presentation follows:

#### **OVERVIEW OF THE PRESENTATION**

Ms. Vollmer thanked everybody for the opportunity to make her presentation. She began with an overview of her presentation:

- Meeting objectives
- Public Participation Process
- · Background to the project;
- Study area;
- The Environmental Assessment Process
- Potential Impacts identified to date; and
- The way forward.

#### **BACKGROUND TO THE PROJECT**

Eskom investigated several options to provide the necessary electricity to the Port Elizabeth region. Figure 1 (on the following page) shows the proposed alternative transmission lines that were investigated during the Scoping Phase. Of these, alternative 1 was identified as being the

preferred alternative. This proposed transmission line would be 300 - 350km in length. Ms. Vollmer showed a map depicting the study area (figure 1 – on the following page).

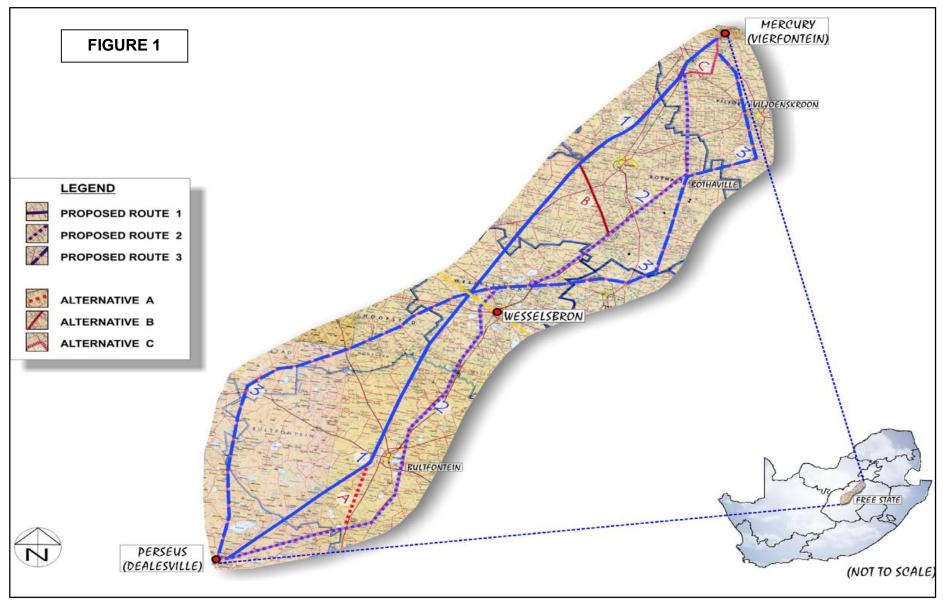


FIGURE 1: THE STUDY AREA WITH THE ALINGMENTS INVESTIGATED DURING THE SCOPING PHASE – OPTION 1 WAS CHOSEN AS THE PREFERRED ALIGNMENT AND IS UNDER INVESTIGATION IN THE EIA PHASE

#### NEED FOR THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

Ms. Vollmer explained that in terms of Section 26 of the Environment Conservation Act (Act 73 of 1989), the development falls within the ambit of listed activities (Section 1 of Government Notice R. 1183 of 05 September 1997) and is therefore subject to an Environmental Impact Assessment (EIA).

Government Notice R 1183, Schedule 1 clause 1a, states that EIAs need to be conducted for "the construction or upgrading of facilities for commercial electricity generation and supply."

#### THE LEGAL ENVIRONMENTAL PROCESS

Ms. Vollmer showed a slide depicting the EIA process (figure 2- following page). She noted that it was a two-tiered process that entails a Scoping Phase (Phase I), followed by an Environmental Impact Assessment Phase (EIA Phase or Phase II). The Scoping Phase entailed the identification of the possible impacts that the development might have on the environment and made a recommendation as to the preferred alignment. This phase has been completed.

The EIA Phase investigated, in greater depth, the environmental impact that the preferred alignment corridor would have on the environment and proposed a series of mitigation measures. During the EIA Phase, the preferred corridor would be further refined in an effort to ensure the best possible routing.

In order to achieve these objectives, Ms. Vollmer explained, public involvement was of paramount importance.

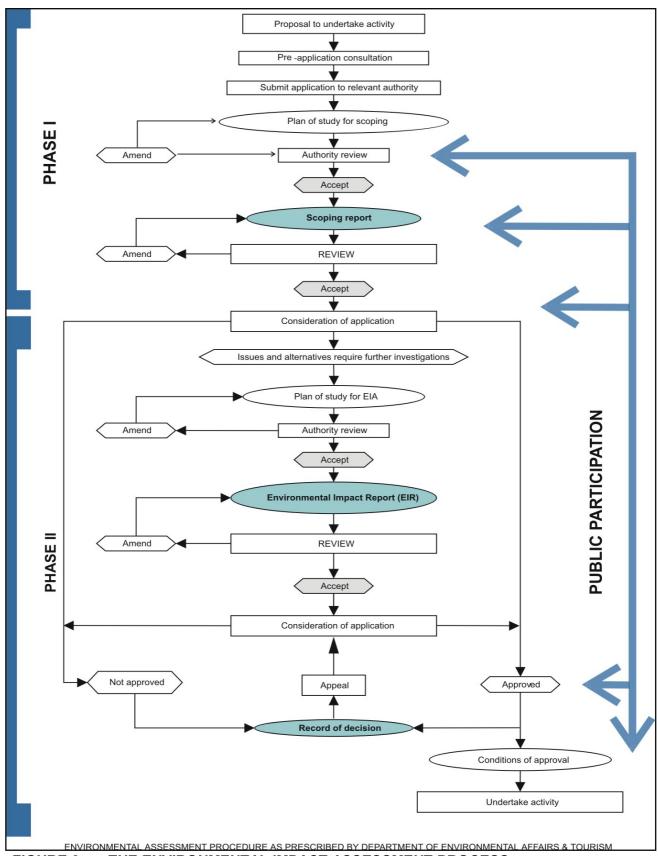


FIGURE 2: THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

#### **PUBLIC PARTICIPATION**

Not much time was spent on the Public Participation process at the meeting. The following section is included to provide Interested and Affected Parties (I&APs) with background to the Public Participation Process.

In order to actively participate, I&APs need to understand the nature and objectives of Public Participation. Ms. Vollmer touched on the following:

#### WHAT IS PUBLIC PARTICIPATION?

A process leading to informed decision-making through the joint effort of:

- Interested and Affected Parties (I&APs);
- The proponent;
- Technical experts; and
- Authorities.

...who work together to produce better decisions than if they had acted independently (Greyling, 1999).

#### **OBJECTIVES OF PUBLIC PARTICIPATION**

To provide stakeholders with information on:

- The background and purpose of the proposed project;
- The technical and participatory processes to be followed;
- The way in which the contributions of the I&APs will be incorporated; and
- The anticipated environmental impacts of the proposed project.

Allow I&APs the opportunity to provide their inputs (issues, concerns, questions and suggestions) into the EIA and to provide stakeholders with an opportunity to assist in determining issues that should receive attention in the report.

#### THE PROJECT SPECIFIC PROCESS

#### THE ESKOM PROCESS

Ms. Vollmer indicated that Eskom had taken the following actions prior to appointing an independent EIA Consultant:

- 1. The first step in the process was to identify various alternatives to accomplish the said objective.
- 2. This lead to the creation of a study area.

Thereafter an independent Environmental Consultant was appointed. It was the task of this Consultant to conduct an EIA in terms of current environmental legislation. (The company PD Naidoo (consultants), in association with Strategic Environmental Focus (SEF) won the tender to conduct the EIA and appointed Afrosearch (Pty) Ltd. to conduct the Public Participation Process for the EIA). The following activities have been undertaken to date:

- 1. Project registration with Department of Environmental Affairs and Tourism (DEAT) and the Free State Department of Tourism, Environment and Economic Affairs (DTEEA):
  - 27 February 2003.
- 2. Approval of Plan of Study for Scoping:
  - 12 March 2003.
- 3. Public participation process:
  - April 2003
    - Newspaper advertisements were placed in relevant newspapers between 07 and 11 April 2003;
    - Focus Group Meetings 15 and 16 April 2003 (as well as 14 May 2003 and 07 August 2003);
    - Open Days and Public Meetings 23 and 24 April 2003; and
    - Availability of Draft Scoping Reports for public comment May 2003.
  - BID, newspaper advertisement and letters to I&APs:
    - Continuous.
  - o May to June 2003:
    - The Draft Scoping Report was available for review between 26 May 2003 and 12 June 2003.
- 4. The Final Scoping Report was submitted to the authorities on 25 June 2003. This report carried the recommendation that "alternative 1" be investigated as the preferred alternative.
- 5. The Landowner Workshops (this workshop) 06 and 07 August 2003.

The following activities are to be carried out prior to the submission of the Environmental Impact Assessment Report (EIR) to the authorities:

- 1. Public Meetings for the EIA Phase 10 and 11 September 2003.
- 2. The Draft EIA Report would be made available for public review and comment and the final EIA report would be submitted to the DEAT and DTEEA for decision-making.
- 3. Upon receipt of the Record of Decision (RoD) from the DEAT an advertisement would be placed in local newspapers and all registered Interested and Affected Parties (I&APs) will receive a notification. This will afford I&APs the opportunity to lodge an appeal against the decision. After the DEAT addressed the appeals, Eskom would start with the negotiation process and secure a servitude for the transmission line.

#### THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

Ms. Vollmer informed attendants that a team of specialists were appointed to assist the environmental consultants in conducting the EIA. For this project, the following specialists have been appointed:

- Geo-Technical;
- Soils (Pedologist);
- Bird Specialist (Ornithologist);
- Aquatic;
- Fauna and flora investigations;
- Visual Impact;

- Heritage (including history and archaeology);
- · Tourism; and
- Social Impact.

The following issues were to be investigated by the specialists:

- Physical & biological environment:
  - Soils, Geo-Technical Aspects, Topography etc.;
  - Hydrology; and
  - o Fauna & Flora.
- Social environment:
  - Social assessment;
  - o Tourism; and
  - Heritage Resources.

Ms. Vollmer noted that the following potential impacts have already been identified:

- Contamination of surface water;
- Disturbance of riverine habitats:
- Impacts on bird life;
- Increased surface water run-off;
- Increased erosion along river banks;
- Floral disturbance:
- Faunal displacement and disturbance;
- Visual intrusion;
- Health, safety and security risks;
- Impact on land with historical value, and heritage resources; and
- Increased ambient noise levels (during construction only).

She said that the natural pans were highlighted as being particularly sensitive. The pans were unique and had an ecological integrity that needed to be maintained due to:

- Their unique biodiversity brought about by the physical environmental conditions;
- Habitat for a variety of fauna and flora (important for breeding and feeding); and
- The fact that pans are sensitive ecological systems (symbiotic relationships).

#### 5.3 ESKOM'S CONSTRUCTION PRACTICES

MS CAROL STREATON (ESKOM: TRANSMISSION)

A summary of Ms. Streaton's presentation follows:

#### **OVERHEAD VS. UNDERGROUND**

To construct a 400kV transmission line underground, would require a 60m wide piece of land. Within this servitude, all trees, bushes, buildings and structures would have to be removed and remain so even after construction. This would mean that the land would be sterile as no

developments can be undertaken in the servitude.

One of the main problems of an underground power line is cooling. Conductors would have to be either air cooled (with air conditioners) or oil cooled. Cooling of the conductors does not present a problem when power lines are constructed overhead, as they are cooled by the natural flow of air.

An underground power line costs in the region of 20 times more than an overhead power line (R 20 million as opposed to R 1 million per kilometer.)

#### SERVITUDE RESTRICTIONS

Eskom does not allow people to live within the servitude and tall trees would be removed. (Eskom prefer not to have centre pivot irrigation systems within the servitude, although a strategy could be established to accommodate this type of irrigation.)

Activities such as grazing and crop planting can continue normally.

#### **GATES**

Eskom would identify all places where gates were needed in terms of accessing the servitude. Agrade gates would be erected. Eskom does take cognisance of the type of gate required, for instance, if there is a jackal proof fence, a jackal proof gate would be erected.

#### **ACCESS ROADS**

Construction activities do not require that an actual road be built adjacent to the power line. The road 'develops' as a result of the construction vehicles moving up and down this strip over the construction period.

Access roads are only erected under special circumstances to gain access to the servitude for construction and maintenance purposes. Such instances would be discussed with the landowner.

#### **BUSH CLEARING**

The whole servitude area (55m) will not be cleared of vegetation. Construction activities require that a 4m wide strip be cleared in the middle of the servitude for stringing purposes and the area where the foundation for the tower needs to be constructed will be cleared.

In sensitive areas such as valleys, endemic vegetation or by special agreement between a landowner and Eskom vegetation would not be removed. Alien plants such as Sekelbos, Lantana and Port Jacksons are removed and treated with herbicide.

#### **CAMPS**

For a power line of this length (300 - 350 km) it is anticipated that two construction camps would be necessary. Each camp could house about 300 or more construction workers at any given time.

The camps are controlled and monitored by the Environmental Officer according to the requirements set out in the Environmental Management Plan (EMP). The EMP typically makes the following recommendations: construction camps have to be fenced, no live animals may be

kept, and fires are only allowed in designated areas. Rehabilitation measures that need to be carried out once construction is complete are stated.

#### **ENVIRONMENTAL MANAGEMENT PLANS (EMP) AND THE ENVIRONMENTAL OFFICER**

The EMP covered a number of generic aspects with regard to the general conditions relating to the protection of the environment during the construction phase. It may include specific stipulations as requested by each landowner during the negotiation phase. The EMP forms part of the legal contract that Eskom has with the contractor and is therefore enforceable.

An environmental officer would be available throughout the construction phase and all affected landowners would have his/her contact details. In the case of any irregularities, the environmental officer should be contacted to resolve the matter.

#### **TOWER TYPES**

Eskom uses a variety of tower types for the construction of transmission lines. On this line, cross-rope suspension towers would be used for the straight stretches, while self-supporting towers (so-called bend or strain towers) would be used on bends. Eskom tries to keep bends to a minimum. Because the strain towers use more steel, they are far more expensive and are visually more intrusive.

#### CONSTRUCTION

It is anticipated that construction could take approximately 2 years. Construction is a cyclical process, all the gates are erected first, followed by bush clearing, the digging of foundations, the erection of the towers and finally stringing. The implication of this is that over the two-year construction period landowners would have construction workers on their property intermittently.

Construction equipment is very large. Towers were assembled on site, except in cases where there was not enough space. In sensitive areas construction activities are undertaken mostly by hand (digging of foundations) and helicopters are used to place the towers.

Foundation holes were covered to prevent humans and animals from falling into the holes.

Crop planting can go on as normal. If crops were destroyed during construction, Eskom compensates the farmer according to the market value of the crop.

Vegetation usually re-establishes itself once construction has been completed, however, additional rehabilitation will be done where necessary.

#### **STRINGING**

Stringing is a specialised activity. The conductors need to be kept under tension during the stringing process because they get damaged when they touch the ground. Stringing is usually done by a machine, but could also be done by hand or helicopter.

Camps would be established in areas negotiated with the landowner where various materials such as cable drums etc. could be stored. All construction waste would be removed once the construction of the transmission line is complete.

#### **LABOUR**

The construction activities relating to the construction of transmission lines are specialised and therefore skilled labour is required. For this reason very few local labour opportunities exist.

Ms. Streaton noted that Eskom does not construct their own transmission lines, but made use of a contractor.

#### **IMPACTS GO BOTH WAYS**

The environment also has an impact on the transmission lines. Examples are veld fires, lightning, bird streamers (excretion) and birds flying into the earth wires.

Eskom has done a lot of work on managing the impact of birds on power lines. Bird guards are erected in areas where there are insulator strings and conductors. "Bird flappers" are placed on the line where the ornithologist anticipate that the power lines cross flight paths.

#### INDICATORS ON POWER LINES

Ms. Streaton explained that, where required, the line is marked. Instances where markers would be used are:

- Places where there is aircraft activity;
- In bird flight paths (as indicated above); and
- Stays are marked upon request from a landowners, e.g. in cash crop farming areas.

#### ARCHAEOLOGICAL AND HISTORICAL SITES

Once the final alignment for the transmission line has been decided on, the archaeologist and botanist walk the entire line to identify sites of historical importance or ecological sensitivity.

#### **SUB-STATION CONSTRUCTION**

Both sub-stations would be upgraded. It should be noted that the property on which the substation occurs is big enough and would not need to be extended.

#### **MAINTENANCE**

Maintenance is usually done bi-annually and can be done by helicopter, on foot or by means of a 4X4 vehicle depending on the type of maintenance required.

In the contract that the Eskom negotiates with the landowner, the landowner can specify his/her requirments, e.g. that the landowner should be contacted prior to maintenance teams entering the property.

It is not necessary for the maintenance road to run alongside or underneath the power line, for the most, existing routes are used.

#### **NEGOTIATION**

Eskom does not buy the land, only the rights to convey electricity across the land within the agreed servitude.

An individual contract is negotiated between Eskom and each affected landowner and this results in the signing of an option. Eskom has one year to exercise the option.

An independent valuator assists in the valuation process to ensure that a fair price is obtained by the landowner.

Once Eskom decides to exercise the option, the servitude is registered against the title deed attached to the property at the deeds office. At that stage the compensation is paid out with interest (the interest will be paid from the time the option contract was entered into, until the servitude is registered.)

#### 6. DISCUSSION

#### **A**LL

The sheet hereunder indicates the issues raised during the day. Please note that it proved very difficult to note down issues, questions and concerns raised around the map. If there are any pertinent issues that you would like to have noted, kindly contact Ms Marita Oosthuizen of Afrosearch (Fax: (012) 362-2463, Tel: (012) 362-2908 or marita@afrosearch.co.za) so that it may be included.

No.	SURNAME AND INITIALS	ORGANI- SATION	DATE	TYPE OF COMMUNI- CATION	ISSUE / COMMENT / QUESTION	CROSS-REFERENCE TO REPORT / RESPONSE
07/08-1	Van der Walt, F (Mr)	Landowner	7-Aug-03	Landowner Workshop	Arrangements have already been made for two pivot points on the farm Viljoenshof in the Bultfontein district.	Comment noted, thank you.
07/08-2	Foulds, IGM (Mr)	Landowner	7-Aug-03	Landowner Workshop	Landowners should be compensated for their inconvenience.	Currently this is not done, but cognisance is taken of this issue.
07/08-3	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	Mr. Venter represents a number of affected farms (Katbosch and Saaibult) of Mr. GJM du Toit and the Estate Mienie	Comment noted, thank you.
07/08-4	Venter, PS (Mr)	Representative of	7-Aug-03	Landowner Workshop	There is no apparent reason for the line to pass here if the capacity is needed in Port Elizabeth. The line should then rather pass through the middle or eastern Free State.  Even if this line did have to reach Vierfontein, it was still unnecessary to pass through this area.	Please refer to the answer below this table (Figures 3 to 5).
	several lando				The argument regarding the fact that this line is necessary because Eskom does not want to "put all its eggs in one basket" does not make sense.	The existing lines already supply large regions with electricity. If another high production and electricity use area is linked to the existing line and something goes wrong, the impact would be extremely negative. The risk is, therefore, too high. This is also why the KwaZulu Natal option is being investigated.
07/08-5	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	Land in this area has a very high agricultural potentian and is very expensive - up to R 8 000-00 / ha.	Comment noted, thank you.
07/08-6	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	The impact of the cross-rope suspension pylons were not discussed. The fact that the stays are 70 m apart with the pylons 20 m apart makes it impossible for farmers to farm in the entire 70 m span. This will have a severe economic impact over time.	
07/08-7	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	Visual impact should be subordinate to practical implications.	Comment noted, thank you.
07/08-8	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	Intensive crop spraying takes place over the entire district and beyond. Besides the economic implications, there is also a very real safety threat.	Comment noted, thank you. A meeting was held with the Civil Aviation Authority regarding the impact on aircraft. A meeting was also held with the Bloemspruit Airforce Base and the SANDF Air Force.
07/08-9	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	Much attention was given to the natural environment, but there is no study regarding the economic and agricultural impact of this line.	Comment noted, thank you. An agricultural economist will be appointed to address these inputs
07/08-10	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	The Bothaville / Wesselsbron area has an extremely high agricultural potential and no power line should be constructed in this area.	Comment noted, thank you

07/08-11	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	The impact on grazing land would be significantly less.	Comment noted, thank you.
07/08-12	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	Where is the Mercury and Perseus sub-stations. It is not in the towns.	No, Eskom refers to the closest town. The Perseus substation is north of Dealesville, while the Mercury substation is close to the mine.
07/08-13	Van Zyl, WH (Mr)	Landowner	7-Aug-03	Landowner Workshop	What are the do's and do not's within the servitude area?	There may be no permanent structures or tall trees, but for the rest, normal activities may continue.
						Comment needs to reach Afrosearch within 2 to 3 weeks after the meeting (07 August 2003) for inclusion in the process.
07/08-14	Foulds, IGM (Mr)	Landowner	7-Aug-03	ug-03 Landowner Workshop Until when	Until when may I&APs comment on the proposed alignment?	On 10 and 11 September 2003 a round of public meetings. The primary aim of these meetings will be to give feedback of the findings during the EIA Phase and not necessarily to identify new issues and discuss the alignment, but the opportunity is there. Thereafter the Draft EIA Report will be made available for public comment (the comment period will be two weeks). Only after the comments were received and integrated into the report will a Final Environmental Impact Report be submitted to the authorities for decision-making.
						After the Record of Decision (RoD), which is the final decision from the department is received, there will be an appeal period of 30 days. During this period, appeals can be lodged against the decision. Appeals are lodged with the National Department of Environmental Affairs and Tourism (DEAT) and should include the reason for the appeal. The DEAT will investigate the appeals and make a final decision.
07/08-15	Foulds, IGM (Mr)	Landowner	7-Aug-03	Landowner Workshop	The 2 to 3 weeks to respond now and two weeks to comment on the Draft EIA Report is too little.	Comment noted, thank you.
07/08-16	Ackerman, HF (Mr)	Landowner	7-Aug-03	Landowner Workshop	Is it necessary for the access and maintenance road to run underneath the power line?	No, during construction an 8 m "road" underneath the power line is required, but for maintenance existing roads are used.
07/08-17	Foulds, IGM (Mr)	Landowner	7-Aug-03	Landowner Workshop	Is it possible to use self-supporting towers in lands so that the impact on farming activities may be minimised?	This option will be investigated and feedback will be provided at a later stage.  This option will be investigated.

07/08-18	Ackerman, HF (Mr)	Landowner	7-Aug-03	Landowner Workshop	Is it possible for a landowner to refuse permission to Eskom?	Yes, but it should be remembered that the government have a mandate to expropriate land if it is in the interest of the country as a whole. Therefore, Eskom will be able to expropriate a landowner(s) if necessary.  The negotiator on this line (Mr. Koos van der Merwe) stated that he has never expropriated anybody, but confirmed that it is a possibility. The intention is not to expropriate, but rather to move the line slightly to accommodate the landowner.
07/08-19	De Bruyn, PJ (Mr)	Landowner			If Eskom can expropriate, there is no need for this process and this meeting. (Mr. De Bruyn subsequently left the meeting.)	There is a process underway where a number of things may still change. It might not be a good idea to leave the process until all avenues are investigated and remedies sought.
07/08-20	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	Must the line go straight?	It is the ideal, but it does not often work out that way. Bends must be kept to a minimum and therefore it is not always possible to move the line significantly, but it is possible to bend the line at 3° maximum at a time.
07/08-21	Venter, PS (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	This is an area where there are often big differences in soil potential over small distances. Would it be possible to have the line go over land with a lower agricultural potential?	Yes, for the most it would be possible. The aim is to take the line over land with a lower agricultural potential as far as possible.
07/08-22	Venter, PS (Mr) and Louw, TJ (Mr)	Representative of several landowners	7-Aug-03	Landowner Workshop	It is suggested that another alignment be investigated, namely Vierfontein - Leeudoringstad - Makwassie - Dealesville.	Thank you for this suggestion, it is under investigation at the moment.
07/08-23	Hattingh, BM (Mr)	Landowner	7-Aug-03	Landowner Workshop	In area where there are existing power lines, old pylons are left in the field and it is up to the landowner to remove them.	This is a problem with Eskom: Distribution. Ms. Carol Streaton of Eskom: Transmission will take the matter up with the responsible person in the Distribution company.
07/08-24	Botma, IG (Mr)	Landowner	7-Aug-03	Landowner Workshop	Where two power lines go parallel, how big is the servitude?	27 m plus 55 m, l.e. 82 m.
07/08-25	Pieterse, FP (Mr)	Landowner	7-Aug-03	Landowner Workshop	The line runs across the farm Viljoenshoff (Bultfontein district). Planning has already been done for two pivot point irrigation systems on this farm and it seems as if the proposed alignment will cross the planned pivot points.	Comment noted, thank you.
07/08-26	Pieterse, FP (Mr)	Landowner	7-Aug-03	Landowner Workshop	The line runs across the SandVet Irrigation Scheme as well as a number of other pivot points in this region (Bultfontein district).	A meeting was held with Mr. Chris van Staden from the SandVet Water Scheme.
07/08-27	Pieterse, FP (Mr)	Landowner	7-Aug-03	Landowner Workshop	If the line could run to the west of the farm Viljoenshoff, there are no further pivot points and to the north is grazing land.	Comment noted, thank you.

#### **RESPONSE TO QUESTION 4 AS LISTED ABOVE**

The increased capacity is required on the Cape corridor. The reason for this is illustrated pictorially below. The main Generation Pool is in the Witbank area. This load is transferred thought transmission lines to load centres throughout

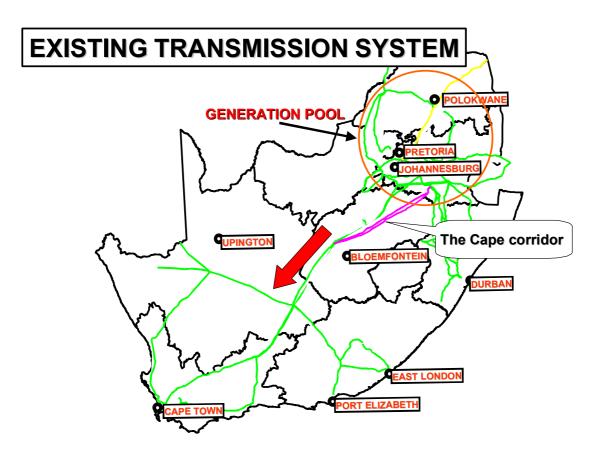


FIGURE 3 ESKOM'S EXISTING TRANSMISSION SYSTEM

the country. The Cape corridor is the bulk transmission route supplying the greater Cape area. This includes the Southern Cape, Western Cape, Northern Cape and Namibia.

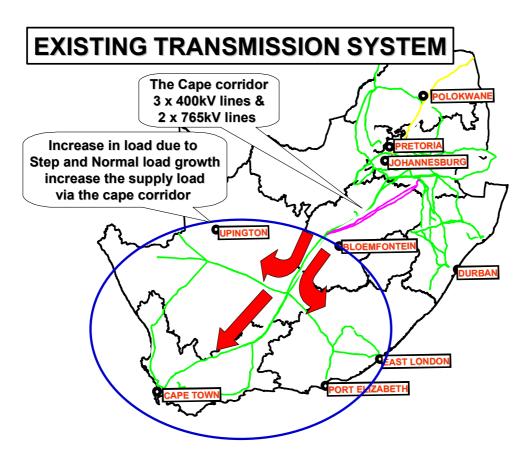


FIGURE 4: ESKOM'S EXISTING TRANSMISSION SYSTEM WITH AN INDICATION OF THE EXISTING NEED IN THE AREA SOUTH OF BLOEMFONTEIN

The greater Cape area is currently at risk of supply loss for various contingencies on the Cape corridor. With the increasing load in the greater Cape area strengthening of the Cape corridor is required.

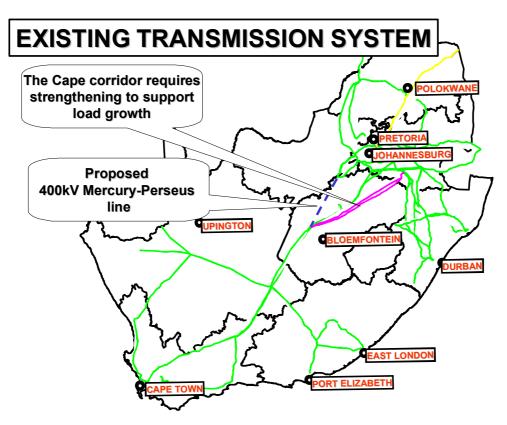


FIGURE 5: THE RATIONALE BEHIND THE PROPOSED MERCURY - PERSEUS 400kV TRANSMISSION LINE

The proposed 400kV Mercury-Perseus line will provide strengthening.

The table below indicates options to strengthen the Cape corridor.

GENERAL CAPE STRENGHTENING						
REINFORCEMENT		BASE	SUB TOTAL	50%	TOTAL	
PERSEUS - MERCURY (250 KM)	250	1.4	350	175	525	million
ALPHA – BETA SERIES CAP	2	300	600	300	900	million
ALPHA – BETA 3 <sup>RD</sup> 765 kV LINE (450 KM)	450	2.4	1080	540	1620	million

A transmission line takes 2 year to construct. At 2002 load forecast indicted the requirement for strengthening by 2007. Indications are that natural load growth in the greater Cape area is growing at a faster rate that anticipated. This excludes step loads such as the Pechiney Smelter at Port Elizabeth.

If the line length is increased this has a negative effect on the project viability as the line costs increase with  $\pm R1.4$ m/km. There is also an increase in losses, which negatively impacts the project. If the line in lengthened beyond 30%, addition compensation will be required ( $\pm R150$ m).

An additional benefit that the 400kV Mercury-Perseus line bring is the next corridor.

#### 7. THE WAY FORWARD

#### NOT DISCUSSED DURING THE MEETING - INCLUDED FOR YOUR INFORMATION

The discussion never reached this stage as the meeting adjourned after the session around the map. Listed below, please find a summary of the way forward:

- The meeting would be minuted and questions, issues and concerns taken up in an Issues Register;
- · Technical studies by the various specialists are underway;
- Further public meetings would be held on 10 11 September 2003 to give feedback to I&APs (see details below);
- Meetings would be minuted and concerns raised addressed in the EIR;
- A Draft EIA Report would be made available for public comment for a period of 14 days.
   (Copies would be available at the following places:
  - o libraries / public places:
    - Dealesville Public Library;
    - Bultfontein Public Library;
    - Hertzogville Public Library;
    - Hoopstad Public Library;
    - Wesselsbron Public Library;
    - Allanridge Public Library;
    - Bothaville Public Library;
    - Viljoenskroon Public Library; and
    - Vierfontein Police Station.
  - o nthe internet at <a href="http://www.eskom.co.za/eia">http://www.eskom.co.za/eia</a> and
  - on CD-Rom (CD-Roms would only be available from Afrosearch by arrangement).
- At the end of the comment period, responses would be incorporated into the EIA Report and a final report will be submitted to the national and provincial environmental departments;
- A final record of decision would be obtained from DEAT (national).
- The record of decision would be advertised (anticipated to be in January 2004).

Please take note of the dates of the Public Meetings during the EIA Phase:

- BULTFONTEIN: 10 September 2003 at 14:00 at the Bultfontein Town Hall (3 Bosman Street);
   and
- BOTHAVILLE: 11 September 2003 at 14:00 at the Bothaville Commando Hall

#### **AFROSEARCH**

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Web site: http://www.eskom.co.za/eia

# 8. CLOSURE

# DR DAVID DE WAAL (AFROSEARCH)

The formal meeting adjourned at approximately 15:30 at Bultfontein and 15:45 at Bothaville. Thereafter the meeting moved to the series of 1:50 000 maps for further discussion. In both instances, this part of the meeting adjourned at approximately 16:30.

# 9. ATTENDANCE REGISTER

The attendance register for the meeting at Bothaville is attached.

AAM EN VAN	ORGANISASIE EN POSISIE	TELEFOONNOMMER	FAKSIMILE	POSADRES	E-POS
NAME AND SURNAME	ORGANISATION AND POSITION	TELEPHONE NO.	FAXIMILEE	POSTAL ADDRESS	E-MAIL
Streaton, Carol (Ms)	Eskom: Transmission (Public	(011) 800-5411 (W)	(011) 800-3917	PO Box 1091	carol.streaton@eskom.co.za
	Participation Advisor)	083 633 1545 (C)		JOHANNESBURG, 2000	
Van der Merwe, Koos (Mr)	Eskom: Transmiossion (Land and	082 805 7605 (C)	(011) 800-3917	PO Box 1091	jjvdm@reskom.co.za
	Rights)			JOHANNESBURG, 2000	koma@global.co.za
Maduse, Levy (Mr)	Eskom: Transmission (Project	(011) 800-2630 (W)	(011) 800-3917	P. O. Box 1091	levy.maduse@eskom.co.za
	Leader)	082 805 7367 (C)		JOHANNESBURG, 2000	
Vollmer, Bernadette (Ms)	Strategic Environmental Focus	(012) 349-13078 (W)	(012) 349-1229	PO Box 74785	bernadette@sefsa.co.za
				LYNNWOOD RIDGE, 0400	
Oosthuizen, Marita (Ms)	Afrosearch	(012) 362-2908 (W)	(012) 362-2463	PO Box 13540	marita@afrosearch.co.za
		082 378 4903 (C)		HATFIELD, 0028	
De Waal, David (Dr)	Afrosearch	(012) 362-2908 (W)	(012) 362-2463	PO Box 13540	ddw@afrosearch.co.za
		083 227 8681 (C)		HATFIELD, 0028	
Pieterse, FP (Mr)	Landowner (Goedehoop & Viljoenshoff)	(051) 853-2173 (H)	(051) 853-2173	PO Box 495	fpp@cybertrade.co.za
		082 404 4004 (C)		BULTFONTEIN, 9670	
Hattingh, BM (Mr)	Landowner	(056) 515-2554 (H)		PO Box 291	
		083 305 1354 (C)		WESSELSBRON, 9680	
De Bruyn, PJ (Mr)	Landowner	083 293 0680 (C)			
Rossouw, J (Mr)	Landowner	(056) 515 4328 (H)		PO Box 513	
		082 578 7338 (C)		BOTHAVILLE, 9660	
Foulds, IGM (Mr)	Landowner	(057) 899-2505 (W)		PO Box 101	
		082 361 0360 (C)		WESSELSBRON, 9680	
Van der Walt, F (Mr)	Landowner	(057) 899-1113(H)		PO Box 18	
		082 561 4995 (C)		WESSELSBRON, 9680	

Botma, JB (Mr)	Landowner (Mooidam & Klipfontein)	(056) 515-2631 (H)	(056) 515-2631	PO Box 169	
		083 449 0975 (C)		BOTHAVILLE, 9660	
Botma, IG (Mr)	Landowner	(056) 515-4662 (H)		PO Box 248	gbotma@cybertrade.co.za
				BOTHAVILLE, 9660	
De Bruyn, W (Mr)	Landowner	083 566 1457 (C)		PO Box 117	
				WESSELSBRON, 9680	
Louw, TJ (Mr)	Landowner	082 787 3373 (C)		PO Box 91	
				VIERFONTEIN, 2615	
Ackerman, HF (Mr)	Landowner	(056) 515-2236 (H)	(056) 515-2236	PO Box 278	
				BOTHAVILLE, 9660	
Venter, PS (Mr)	Representative of Mr GJM du Toit	(056) 575-2855 (W)		PO Box 827	venter@intekom.co.za
	and Mienie Estate			BOTHAVILLE, 9660	
Van Zyl, WH (Mr)	Landowner	(057) 899-1277 (H)	(057) 899-1278	PO Box 254	wvz@global.co.za
		083 468 2388 (C)		WESSELSBRON, 9680	